DOCUMENT RESUME

ED 070 739 SP 005 857

AUTHOR Davidovich, Lila
TITLE Participant Observation in A School Setting.
SPONS AGENCY Toronto Board of Education (Ontario). Research Dept.
NOTE 23p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Classroom Observation Techniques; *Classroom Research; *Educational Researchers; *Evaluation; *Observation; Research Criteria; Research Methodology

ABSTRACT

This report describes participant evaluation as a method of studying social phenomena. A review of literature presents participant observation in relation to some of the other techniques of research, e.g., experimentation and statistical surveys using pre-tested questionnaires. Lengthy discussion of seven problem areas of participant observation is presented. These areas concern who should observe, what kind of role should be assigned to the observer, the avoidance of bias, how the observer may test for bias in the data used for conclusions the possibility of operational and basic research in a school system, who determines the final disposition of the research findings, and some moral implications of participant observation. Four helpful tentative suggestions for the participant observer are presented. A 14-item bibliography is included. (MJM)

ED 070739

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

RESEARCH SERVICE

issued by the
Research Department

FILMED FROM BEST AVAILABLE COPY

SP 005 857

THE BOARD OF EDUCATION FOR THE CITY OF TORONTO

ED 070739

PARTICIPANT OBSERVATION IN A SCHOOL SETTING

by [redacted]

Mrs. Lila Davidovich

PARTICIPANT OBSERVATION IN
A SCHOOL SETTING

Although this article deals primarily with participant observation as a way of studying social phenomena, an attempt will be made first to put this technique of research in the social sciences into perspective in relation to some of the other techniques of research, e.g., experimentation and statistical surveys using pre-tested questionnaires.

Both research methods seek reliable data, but since not all data are equally accessible by both methods, we must choose the method or combination of methods which will yield the most reliable information.

If we have gathered information by observation in a natural setting, we must eventually extract the relevant data and describe whatever recurring patterns of behaviour we have discovered. The description will be largely in qualitative terms--for example, "the system bred distrust," "he seemed to be very angry," or in quasi-statistical terms--"a programme of that kind did not seem to motivate most of them," etc. Descriptive statistics may be provided to support the conclusions.

If we gather data in a structured experiment or by means of pre-tested questionnaires, we proceed to describe the patterns in statistical terms, indicating central tendencies, dispersions and variance, degrees of relationship between variables, probabilities of chance occurences, etc.

In both methods we must identify in sufficient detail the steps we took in the collection and analysis of data so that others (or we ourselves) may repeat the experiment or observe in a similar natural setting and see to what extent they (or we ourselves) come up with similar findings.

The laboratory method of gathering data in the social sciences has been defined by a number of distinguished experimenters.

Festinger defines a laboratory experiment as one "in which the investigator creates a situation with the exact conditions he wants to have and in which he controls some and manipulates other variables"[1]

In a similar vein Zelditch and Hopkins suggest that "To 'experiment' is so to manipulate the conditions under which some event is made to occur that the effects produced by different sets of initial conditions can be contrasted.....By 'laboratory' is meant any setting that allows the investigator to control vigorously the conditions under which he makes his observations."[2]

Kaplan gives another, more general definition of experimentation: "Experimentation is a process of observation, to be carried out in a situation especially brought about for that purpose."[3]

A somewhat more descriptive and fuller definition is given by Zelditch and Evan. They suggest that by means of the experiment, "such processes (as occur in the real world) may be simplified, measured, and manipulated, so that rare states may be created, reasonably exact replicates ensured, necessary contrasts obtained, confounding factors randomized, extraneous disturbances eliminated, and the processes observed comprehensively, precisely, and more or less at the will of the investigator."[4]

Exponents of laboratory experimentation usually have little time for the field research or participant observer methods. Of field

research, Chris Argyris said that, "Once he (the investigator) has stated a series of these (hypotheses), he must sit on the sidelines and patiently wait to see if any of the conditions actually evolve and if the predicted behaviour accompanies the conditions as hypothesized."[5]

In contrast, the experimenter makes things happen at his discretion; he starts the experiment when he is ready. But more important, he can use controls, manipulative or statistical, to identify sources of variation. These are said to provide "a reduction in the ambiguity with which variations in the data (dependent-variable measures) may be assigned to the major conditions whose influence is under investigation (independent variables)."[6]

Moreover, if variables are not controlled there is a breakdown in the testing of hypotheses; uncontrolled variables "always remain potential alternative explanations."[7] It is in this respect that laboratory observation is claimed to be superior to observation in a natural setting.

A more direct attack on natural observation is made by E. Zigler[8] who discusses laboratory experimentation in developmental psychology. He argues that the naturalistic method (a variant of participant observation) deals with phenomena too global to refine, and the concepts it develops are too vague to test. The theory thus developed is difficult to prove or to disprove. For this reason he suggests that we should gather data systematically via experiments and construct only "middle-range" rather than "grand" theories.

A somewhat more tolerant position is taken by M. Sidman.[9] He suggests that we should adopt experience from operant conditioning to organizational experimentation by allowing the subject to develop a "steady state of responding" before any experimental variations

are introduced. Such a base line would make it easier to detect the influence of independent variables.

The natural observation method is also not without many worthy champions and supporters. Everett C. Hughes, in his introduction to "Field Work, An Introduction to the Social Sciences,"[10] defines field work as "observation of people in situ; finding them where they are, staying with them in some role which, while acceptable to them, will allow both intimate observation of certain parts of their behaviour, and reporting it in a way useful to social science but not harmful to those observed."[11] For him, good social observation requires that one "be close to people living their lives" and the observer must live his life "and must also report." "The problem of maintaining good balance between these roles lies at the very heart of sociology, and indeed of all social science." He rounds out his definition with the remark that "the outstanding peculiarity of this method is that the observer, in greater or less degree, is caught up in the very web of social interaction which he observes, analyses and reports. Even if he observes through a peep hole, he plays a role: that of spy. And when he reports his observations made thus he becomes a kind of informer. If he observes in a role of a member of the group, he may be considered a traitor the moment he reports."[10]

For these reasons and many others Hughes feels that "learning to do it--both parts of it, observing and reporting--can have some of the quality of mild psychoanalysis."[10] In reporting on his own studies in the U.S.A., Germany and Quebec he says that everywhere "the time came when I had to desert statistical reports and documents and fare forth to see for myself. It was then that the real learning began,

although the knowledge gained in advance was very useful; in fact, it often made possible the conversations which opened the field. One who has some information and asks for more is perhaps less likely to be refused than one who has no advance information; perhaps the best formula is to have advanced knowledge, but to let it show in the kind of questions one asks."[10]

Although Hughes regards field work or participant observation not merely one among several, but the paramount method of social study, it was associated for a long time primarily with ethnology rather than sociology. It first appeared in sociology in the form of social surveys when social surveyers such as Charles Booth in England, Le Play in France and W.L. Thomas and Robert E. Park in the United States went out into the slums to observe the life of the new urban industrial lower classes. Much of what they found they reported "fully, freely, and bitterly" (Robert E. Park), for they aimed at arousing public opinion and bringing about social change. Of Robert E. Park, Hughes says that, "he did more perhaps than any other person to produce the new American sociology in which people went about and did field observations designed to advance theoretical, as well as practical, knowledge of modern, urban society."[10]

The meaning of survey research changed eventually to signify the study of political and other opinions by interviewing with set questions a sample of people who are supposed to represent, statistically a much larger population. Implicit in survey research is the assumption that, "some very large population speaks so nearly the same language, both in letter and figure of speech, that the differences in answers will not be due in significant degree to differences in the meaning of words in the questions. This is a condition hard to meet even in Western literature countries; in many parts of the world, it cannot be met at all,"

says Hughes.[10] With respect to field work or participant observation Hughes claims that it does not have to limit itself to minor variations of behaviour within large homogenous populations. Most of the modern surveys, i.e. those carried out by interviewing with set questions, "would be much more useful if they were followed by even more intensive field work than that which precedes them."

Hughes recommends a kind of synthesis of various methods. In his view "the social science of today requires, in fact, a great many arts of observation and analysis."[16]

The following quotation makes clear the kind of data which can be obtained only through participant observation; here the situation does not lend itself either to controlled experiments or questionnaires.

Although it was carried out only within the last decade, Erving Goffman's study entitled "Asylums" is now a classic example of sociological and psychological research using the method of participant observation. In the preface Goofman points out that his immediate objective in doing field work at St. Elizabeths Hospital in Washington D.C.--"a federal institution of over 7000 inmates...was to try to learn about the social world of the hospital inmate, as this world is subjectively experienced by him. I started out in the role of an assistant to the athletic director, when pressed avowing to be a student of recreation and community life, and I passed the day with patients avoiding sociable contact with the staff and the carrying of a key."[11] A bit further on Goffman writes, "I did not employ usual methods of measurements and controls. I assumed that the role and time required to gather statistical evidence for a few statements would preclude my gathering data on the tissue and fabric of patient life."[11]

These two short extracts contain the essence of what participant observation as a research method is all about. First, the object is not to impose preconceived categories on the people, behaviour, and interactions that are observed. Rather it is to learn to see the world as it is seen and experienced by the subject of study. Secondly, in order to be able to do so, the researcher must be perceived as having a legitimate role in the system, though not an authority role. Finally, the method is not "scientific" in that it does not employ "usual methods of measurements and controls."

Howard S. Becker provides a more direct definition of participant observation in his article in the American Sociological Review. He says, "The participant observer gathers data by participating in the daily life of the group or organization he studies. He watches the people he is studying to see what situations they ordinarily meet and how they behave in them. He enters into conversation with some or all of the participants in these situations and discovers their interpretations of the events he has observed."[12]

Here as with Goffman, the categories in which behaviour, interaction, and experience are to be eventually organized are not those of the observer as much as they are those of the subjects. Nor is there reference to a hypothesis or null hypothesis, to the nature of population or sample, or to the kinds of controls or tests of significance that were used. The main object of the research is to collect information about behaviour in terms of the meanings, symbols and conceptual frames of reference of those who are being studie , rather than in terms of the researcher. Nor does the method depend to any great extent on what the subject says a given experience, interaction, or behaviour means;

rather the researcher looks at the whole syndrome of responses of the subject in order to understand what to him is the true meaning of that experience, interaction, etc.

Hambleton indicates clearly that participant observation can be one of the important "Sources of Data," in educational research. He points out that sometimes we do not get far in "forming insights or true understandings," because "we ask the same questions time after time." He suggests that the questions centred on test results may be the wrong questions for many purposes. Instead, like the landscape painter we should allow "the entire landscape to seep into (our) stream of consciousness." For according to him, the landscape painter "...does not attempt to place a preconceived order on the environment."[13]

The following remark in the same article seems to endorse clearly a participant observer approach to some of the research problems in education. "In education," says Hambleton, "we have been rather prone to attempt to count various phenomena rather than to look at the phenomena and attempt, no matter how crudely, to begin to understand the phenomena and ask significant questions concerning such an occurence. We know how many of this or that, but we cannot explain a great number of the phenomena we have counted." "...We have tended to take snapshots or a view of the product rather than attempt to produce a film or a kinescope. It is conceivable that the real meaning of any situation is in a flow of action rather than in a frozen picture. By what means might we observe a group of children on a playground?...What things may we observe if we look at the teaching-learning process rather than use some measuring device after the process has been completed? There have been remarkably few attempts made to observe the classroom as a single data source...

Processes that we might discuss as a basic source are the interactions which exist between teacher and pupil, teacher and pupils, and pupil and pupil."[13]

I would take this as a clear invitation for the participant observer to come to the school, the playground and the classroom to study the meaning and impact of the educational process on various groups of students, on the teachers, on the school system and perhaps on the larger community. A competent participant observer could not only contribute significantly to our understanding of the impact of different teaching methods on student motivation, but also to our knowledge of the ways in which school organization and administrative practices affect the motivation of both teacher and students. Participant observer research could yield invaluable data on the origins of disparities between student and teacher expectations regarding the purposes of the school, the content of the curriculum, the function of the teacher and the student, the nature of the student-teacher exchange and the function of discipline. On a somewhat larger canvas, such research could give us insight into the teaching function as perceived by principals and inspectors as well as teachers; and finally the role of the school as seen by all concerned--the pupils, the parents, the community as well as teachers, principals, board officials and trustees.

As I indicated at the beginning, my object in preparing this paper was to provide a description of participant observation as a method of studying various social and psychological phenomena in a school setting. My remarks are based on my experience as a participant observer from September to December 1965 in a new experimental school in Toronto, and on the reading that I did in connection with this project.

I had joined the staff of the Research Department of the Toronto Board of Education only about three weeks before undertaking this study. Prior to that I had only a few academic notions of participant observation, so I spent a great deal of my time talking to the Director and the Research Associates in an effort to clarify my role as observer. My advisers discouraged me from adopting any working hypotheses, and from enumerating in advance what I was to look for. This was puzzling to me and made me feel a little uncomfortable; however, it probably turned out for the best. Had I been given working hypotheses at the beginning of my participant observation, I would not have noticed many interesting and important events and behaviours during the three months I spent at the school.

In the short time I had available before school opened, I managed to read some literature on participant observation. In addition, I read as much as I could in the content area in which the school was going to work.

I shall not take up the space available here to give a detailed description of what I did, or how I went about doing it. Instead, I want to identify several general problems which faced me during my brief experience as a participant observer and which, I think, need to be solved if participant observation as a research technique is to be effectively used in the school system.

The main problems I want to touch upon are:

1. If participant observation is to be employed in the school system -
   a) Who should do it:
      1. Regular teachers;
      2. Research staff employed by the school system;
      3. Outsiders who are given access to schools for research purposes?

b) What kind of an educational background should they be expected to have?

2. What kind of a role should be assigned to them to make legitimate their presence in the school?
3. How can we avoid bias on the part of the observer?
4. How can the observer test for bias in the data he uses for his conclusions?
5. Is both operational and basic research possible in the school system?
6. Who determines the final disposition of the research findings?
7. What are some of the moral implications of this form of research?

I suppose the off-the-cuff answer to the first question is that such research can be done by anyone competent to do it. Competence will in turn depend upon what the researcher is going to look at. If the purpose is to study the impact of the classroom on personality development and socialization of children only, then training in developmental psychology, social psychology, and the sociology of small groups may be the basic requirements. If the learning of subject matter is also a concern, then some knowledge of curriculum and teaching methods is highly desirable. The observer who is relatively ignorant of the content of discourse in a classroom is thereby limited in his ability to make meaningful statements about that phase of his observation in the classroom. Lack of knowledge of content may even affect adversely his ability to understand the relationship between the educational process and personality development and socialization of children.

There are never too many qualified people around; those with graduate degrees in the social sciences seek employment in colleges and

universities, whereas practicing teachers do not usually pursue advanced study in the behavioural sciences when these are not instrumental to the promotion of their careers.

During the year I was with the School Board two participant observers were employed there. A third was employed by a department of the University of Toronto. The first two reported their findings only to the Research Department of the Toronto Board; the third reported only to the University. It was generally understood that the findings of the first two would be used by the Board if it saw fit; the research was therefore operational. The work of the third observer must be regarded as basic research in that there was no immediate way of feeding the findings back into the system.

Presumably, then, both types of researchers can make a useful contribution. The researcher who comes from outside may have more freedom; he is identified as a person doing a study, and it is understood that the results will not be made available to the principal, the teachers, the students or the Board. They will be confidential and no one will be identified publicly.

The researchers employed by the Board were in a somewhat more difficult position. Their true roles were assumed to be known to the principals and teachers but not to the students. Neither they nor the teachers and principals knew whether the findings were to be fed back into the school program, or if so, when this was to be done. There was always the chance that their findings and recommendations might be put to the test at any time. Naturally there was some anxiety as to whether operational testing of their results would be done with enthusiasm, or reluctantly, or with a wholly negative attitude. This uncertainty would

tend to dampen zeal for change, and would tend to produce rather conservative recommendations.

The greatest difficulty is presumed to lie in giving the researcher a legitimate role that could take him into classrooms, playground, or anywhere else in the school. W. R. Scott considers the legitimization of the role of the researchers an important issue. He says, "With an increasing number of field studies of formal organizations being carried out, it is important that more attention be given the role of sociological observer as it functions in this context since this role in part determines the kind and quality of data collected."[14]

At present, the only people who have an accepted right to enter a classroom at any time are principals and inspectors. There are good reasons why this is so. For one thing, the interaction between teacher and pupils, a teacher and a specific pupil, and between pupils and pupils, is a delicate process that is easily upset by the presence of an outsider. The principal and inspector come into the classroom with a control function; and like all legitimate control functions, theirs is accepted or tolerated but not necessarily enjoyed by the classroom teacher or students. Partly for this, as well as other reasons, the principal's and inspector's visits to the classroom are rather infrequent. But even if they came more often, neither their skills nor their purpose in coming are those of a participant observer. They have special training and interest in subject matter and teaching styles. They cannot be expected to look at many other social and psychological dimensions and events in the classroom with the eye of a specialist.

Moreover, principals and inspectors have a bias in favour of the system since they are already well advanced in its hierarchy. In

time they are bound to develop some sacerdotal attitudes with respect to the admission of outsiders into the sanctum sanctorum, i.e. the classroom.

The question may be put naively, why not send researchers into classroom as researchers? Are we sure that their ability to work effectively is seriously jeopardized if they haven't a so-called legitimate role other than research? Cannot research itself become a legitimate role? Is it conceivable that any other role can be devised for a researcher which could make legitimate his continued presence in a school?

We now come to the third problem. How can we protect against bias in both the observers and in some sources in their data? As to the bias of observers the answer must lie in the competence and demonstrated objectivity of the researcher. If we distrust either his skill or his scholarly attitude, the answer is surely to not give him the job in the first place. Of course, it is not as easy to check out competence and objectivity of a participant observer as it is of a researcher using the usual empirical research methods, such as questionnaires, surveys, scales, x^2 or "t" tests, etc.

Another check on the researcher's objectivity is the school system itself which, like any institution, tends to be conservative and homeostatic. Any findings submitted by a researcher are not likely to be accepted without the most minute scrutiny for any tendency on the part of the researcher to have "an axe to grind," unconscious bias, or scientific defect.

There is a far greater danger that reports will be tempered to make them acceptable rather than that they will be revolutionary and irresponsible.

The other problem has to do with the degree of confidence the

participant observer can have in information available to him from different sources. How does he really know whether the person who has cultivated his friendship, knowing he has a research role, has not done so in order to "protect" himself? How does he know, for instance, that when he observes someone's class in operation, that he is not looking at a stage play rather than a real event? And conversely, when he observes in a class where the teacher has steered clear of him ever since he got there, how does he know whether the segment of behaviour that he has witnessed is real or whether it is put on for his benefit on a cue from the teacher?

The question of validity is difficult. Its answer depends, finally, on the skill, integrity and judgement of the observer. Validation of observed and reported data required a long and careful process of checking and cross-checking and drawing upon all the sources of data available in the system.

I have already touched on the question of operational and basic research in discussing the first question. As a crass generalization, one might say that the more remote the application of research finding, the easier it is for a researcher to deal adequately with the collected data in terms of its effect on the professional future and reputation of the personnel in the organization under study, specially when they are easily identified. This would argue in favour of basic research; however, effective operational research may be possible in a system where everyone knows in advance that sooner or later operational use will be made of the findings but that nobody need fear that this will be done in any punitive sense.

It is obvious that those in authority will decide what use will be made of the research findings. One possibility is that the study

will be received without comment and pigeon-holed. In that event, some participant observer, who completed what he felt was a significant study and was convinced about its validity and social significance, might be tempted to appeal to the public over the head of school administrators if the latter show indications of trying to suppress the report. This would obviously create a problem. On the other hand, in fairness to school boards, administration officials, inspectors, principals and teachers it must be assumed that they have professional integrity and are anxious to do the best job they can in the schools. If it were demonstrated to them that they stand to benefit in their job performance by using information gathered by participant observation, isn't there a good chance that the findings would get a fair hearing?

There are some indications that it is possible to admit participant observers into classrooms, without disturbing teachers and pupils and acquiring useful data. It is possible that the findings of the three participant observers working in the Toronto Schools during 1965-66 may prove useful for modifying a specific teaching method, school goals, interpersonal relationships, disciplines, etc.

Some major ethical problems can arise out of participant observation if there is an inadequate spelling out of the roles, purposes and procedures that will govern the work of the researchers. It is possible that the school staff may see the observer as a kind of P.R. officer to sell a program to the Board and to the public, especially if the school under study is running an experiment. The researcher may have a different orientation; he may see himself as independent of the principal and responsible for observing carefully and reporting accurately to the Research Department.

If there are any such differences in expectations, they will soon be communicated to everyone in the school. The result may be confusion, recrimination and even cries of treachery. No researcher should go in unless he and all affected staff members have a common understanding of what is expected of him.

Participant observation, in contrast to more impersonal research methods, depends for its success in large measure on good rapport and satisfactory face-to-face relations with individuals under study. Anything that undermines such relationships will create problems. In addition to his professional loyalties the participant observer will most likely develop a multiplicity of personal loyalties and the two may very well clash.

My own experience with participant observation leads me to the conclusion that the role is very likely to impose serious conflict on the researcher. If you are to get valid information about the effects of programs, the human interactions, the state of motivation or morale, the discrepancies between expectations and experience, and between stated goals and accomplishment, or a host of other dimensions present in the social system you are observing, you feel you must eventually be accepted and trusted by the people whom you observe and upon aspects of whose behaviour you are going to report to someone. On the one hand, if you are a normal human being, you have a strong urge to reciprocate trust with trust and confidence with confidence. You are under moral compulsion not to say things that may betray a confidence or may possibly get someone into trouble. On the other hand, as a budding researcher you share Red Skelton's sentiments that you should "call them as you see them," that you have an obligation to communicate your findings with-

out suppressing anything that is relevant to the objectives of the research program. The latter may have been stated in such broad terms that virtually everything observed and recorded may seem relevant.

Eventually you resolve this dilemma in terms of your estimate of how punitive is the total system in which you are involved. If you feel that you can report everything, provided no names are mentioned, you are likely to be more candid than you would be if you suspected that someone up the line will try to make life miserable for those who trusted you and played faired with you in the sub-system you were observing. The smaller this sub-system, the greater is the likelihood that sources of information can be identified by those up the line whether you name them or not. In that event, you are likely to be more circumspect than you would be had you observed a large sub-system where identification of specific sources is much more difficult.

We can only conclude that while the method of participant observation has a number of unique advantages, it also gives rise to some serious difficulties. To begin with, it is important not to start with false expectations. Participant observation does not generally yield precise, quantitative results. In contrast to the laboratory method, it is often impossible to control variables. There are no experiments to be performed which can be repeated at will.

But these sacrifices bring some important benefits. The observer, by taking on a role which is acceptable to the members of the system under observation, becomes a part of that system. He is able to see the community or sub-community as the members themselves see it.

From my own experience, I have found that it is best for a participant observer not to have any pre-formed ideas as to the nature

of the system he is to study. But this does not mean that he should be ignorant of the various aids to effective participant observation. On the contrary, many problems can be forestalled if the observer makes it his business to learn the theory and practice of the technique. The following hints may prove to be helpful.

First, the participant observer should make sure that the nature of his own role is clear to all those with whom he comes into contact. Deception will breed mistrust; the consequences of mistrust are false or distorted conclusions. But while the observer's role should be understood by the members of the system, it should not be conspicuous. The less disturbance the observer's presence causes, the better. His role, therefore, should be legitimate in terms of the system under study.

Secondly, it should be understood by the members of the system that the findings of the study will not threaten them. This is specially important if the study is operational and is likely to have immediate application. If possible, the anonymity of the members of the system should be guarded.

Thirdly, bias on the part of the observer, or on the part of the data at his disposal, can be avoided by many of the usual methods. If the observer is otherwise known to be competent, there should be no serious doubts. In any case, a critical examination of his findings for conscious or unconscious bias provides an effective double-check.

Finally, we cannot escape the conclusion that the role of participant observer carries with it a built-in dilemma. The friendships developed while the observer is in the field may easily keep him from being objective; but the motive for "protecting" friends disappears if both observer and subject are assured that anonymity will be preserved.

These are only tentative suggestions; much more research is needed. It appears that if participant observation is carried out skillfully, it can become as important to the social sciences as the laboratory method is to the natural sciences.

BIBLIOGRAPHY

1. Festinger, L. Laboratory experiments in L. Festinger and D. Katz (Eds.) Research Methods in the Behavioral Sciences. New York: Holt, 1953, p. 137.

2. Zelditch, M. Jr. & Hopkins, T. K. Laboratory experiments with organizations. In A. Etzioni (Ed.) Complex Organizations. New York: Holt, Rinehart & Winston, 1961, p. 465.

3. Kaplan, A. The Conduct of Inquiry. San Francisco: Chandler, 1964, p. 144.

4. Zelditch, M., & Evan W. M. Simulated bureurcracies: a methodological analysis. In H. (Ed.) Simulation in Social Science: Readings. Englewood Cliffs, New Jersey: Prentice-Hall, 1962, p. 49.

5. Argyris, C. Some problems in conceptualizing organizational climate: a case study of a bank. Administrative Science Quarterly, 1958, p. 510.

6. Marx, M. H. The general nature of theory construction. In M. H. Marx (Ed.) Theories in Contemporary Psychology. New York: Macmillan, 1963, p. 11.

7. Marx, M. H. & Hillix, W. A. Systems and Theories in Psychology. New York: McGraw-Hill, 1963, p. 6.

8. Zigler, E. Metatheoretical issues in developmental psychology. In M. Marx (Ed.) Theories in Contemporary Psychology. New York: Macmillan, 1963, pp. 341-369.

9. Sidman, M. Tactics of Scientific Research. New York: Basic Books, 1960.

10. Junker, B. H. Field Work, An Introduction to the Social Science. (Introduction by E. C. Hughes.)

11. Goffman, Erving. Asylums. New York: Doubleday, 1961.

12. Becker, H. S. Problems of inference and proof in participant observation. American Sociological Review, 23(6), December 1958.

13. Hambleton, D. C. Sources of data. Ontario Journal of Educational Research, Winter, 1964-65.

14. Scott, W. R. Field work in a formal organization: some dilemmas in the role of observer. Human Organization, 22(2), pp. 162-168.